Regional Growth

Choices for our Future

DISCLAIMERS

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The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Tri-County Regional Planning Commission, the Michigan State Transportation Commission, the Michigan Department of Transportation, or the Federal Highway Administration.

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Regional Growth: Choices for Our Future

Technical Memorandum
Task II – 8.2
ACCESS TO JOBS/WELFARE TO WORK

Draft Report
August 2002

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1.0 INTRODUCTION

1.1 Background

This task is a product of the "Regional Transit Coordination Study" which was included as a part of the larger "Regional Growth: Choices for Our Future" project. As a part of the transit study, a Transit Task Force was created to guide the transit tasks. The Transit Task Force includes members from MDOT, Capital Area Michigan Works!, county FIA agencies, and local transit providers. Included in the transit study is this "Access to Jobs/Welfare to Work" task, which is designed to compile how the regional trends have affected the ability of welfare recipients to access jobs.

Regional data was utilized from the transit task force members to analyze future regional transit service options and "underserviced" areas. The results of this task will also be related into the overall "Regional Growth: Choices for Our Future" project. The "Choices for Our Future" project is currently underway studying the affect of land use decisions and demographic changes within the region. The Tri-County Regional Planning Commission, representing Clinton, Eaton and Ingham Counties and the Lansing, Michigan metropolitan area, has initiated a major project known as **"Regional Growth: *Choices for Our Future*"**. This effort has a two-fold purpose:

- to develop a shared regional vision of land use and future development patterns, and
- to establish an action plan to address urban sprawl, which will guide public and private investment decisions for the next two decades.

The consensus and specific action plans formulated through this project will improve the transportation system, preserve communities and reduce impacts on environmental systems by linking transportation and other public investments to a shared regional land use vision.

One of the main products of this "Access to Jobs/Welfare to Work" task is a GIS (geographic information system) map, which links location of potential welfare to work clients, availability of childcare, availability of transit and prospective employers in the growth areas of the Tri-County region. The mapping of data portrays a spatial mismatch between employers, transit availability, convenience of childcare options and the welfare recipients, that is the job opportunities within the region moving away from the welfare recipients homes. If a welfare recipient relies on transit, the trip from home to a potential job may be difficult, or not possible at all depending upon the location of the potential job. If the recipient has children, childcare can be another potential problem because there may not be adequate facilities near their home or the potential job.

The "Access to Jobs" topic was included within the "Choices for Our Future" and "Regional Transit Coordination Study" projects because of the regional aspect of the access to jobs dialogue; in other words, welfare recipients may need to cross over county boundaries to get to and from potential work locations. The continued movement of jobs into the periphery

of the urbanized region creates more difficulty for those trying to access those jobs from the central city. The movement of residences into rural areas creates a problem for those who do not have automobile access because transit service is very limited in these areas. For those not familiar with some of the transit operations references within the report, there are some transit definitions listed in Appendix B of this memorandum.

1.2 Scope of Services

This technical memorandum completes the requirements under Task II-8.2 (access to jobs/welfare to work) of the "Regional Growth: Choices for Our Future" scope of work. This technical memorandum is accompanied by a technical memorandum for the Task II-8.1, which includes background on the transit providers and how regional trends affect transit. Also an overall report for the project will be forthcoming to complete the requirements for Task II-8.4. The final report will summarize the highlights of the technical memorandums, as well as, summarizing the results of the Tri-County Transit Forum which was held on June 12, 2002.

1.3 Acknowledgements

Several individuals and organizations contributed to this memorandum through attendance at meetings, providing information and the generation of supportive graphics. The methodology for the report was developed by the Planning and Zoning Center, the Tri-County Regional Planning Commission, as well as, the Transit Task Force, whose members are recognized in Section 8.0 of this document. Parsons Transportation Group was responsible for the travel demand modeling of the "potential" routes presented in Section 4.0. The Tri-County Regional Planning Commission produced the maps generated in Section 3.5.

2.0 ACCESS TO JOBS: PRIMARY ISSUES

2.1 Two Primary Barriers

In many of the national reports focused on welfare to work topics, the two primary barriers to jobs for welfare populations are identified as the lack of transportation and the lack of childcare options. In the Lansing area, leaders have also expressed interest in these concerns for welfare recipients within the center city and out in the rural areas. The scope of this study identified a suspected "spatial mismatch" between the identified regional FIA clients and entry-level job locations.

This "spatial mismatch" for the Lansing region was identified in a recent study focused on Michigan welfare strategies. The study concluded the location of the poor in urban areas separates them from many of the region's job opportunities. "Even in these recent boom times: (there is) persistent poverty for far too many residents of our central cities. Despite plentiful jobs, in urban Michigan unemployment remains high and labor force participation—those just looking for work—is far lower than in the rest of the state. The fundamental barrier to economic self-sufficiency for poor urban residents is their isolation from regional labor markets. The competition for employment occurs in a regional—not local—context." Connecting the Urban Poor to Work: A Framework and Strategy for Action (Michigan Future Inc., 1998)

The report identifies the concentration of poverty, prevalent in many Michigan cities, as a primary barrier to employment and eventual economic self-sufficiency. Table 1 depicts the dissimilarity index data of economic segregation, the higher the number the greater the segregation between census tracts within the metro area. According to these researchers, Lansing grew quite significantly in economic segregation from 1970 to 1990. These higher levels indicate segregation from the rest of the region, and a concentration of poverty within the central urban census tracts.

Table 1
Economic Segregation in Michigan Cities

	Dissimilarity Index		Percent Change
Metro Area	1970	1990	1970-90
Lansing	25.7	35.0	9.3
Detroit	39.4	50.1	10.8
Grand Rapids	31.3	37.5	6.2
Flint	31.9	40.1	8.2
National Mean	32.9	36.4	3.5

A separate study, conducted by the Brookings Institution, studied the barriers to employment for two key groups, the urban poor and the rural poor. The study found that the common barriers for these two groups are transportation. For the rural poor, there are often limited public transportation options, but for the urban poor, the jobs are often located in the suburbs, which are often just as difficult to navigate on public transportation. This study suggests "promoting better access to transportation options for low-income city and rural workers who are isolated from job opportunities and collecting more timely information on the spatial distribution of welfare participants and the places where those leaving welfare roles find work." The Importance of Place in Welfare Reform: Common Challenges for Central Cities and Remote Rural Areas (Fisher and Weber, 2002)

For the Lansing region, the problems faced may not be as dramatic as some of the other areas of the nation, but in Michigan cities, Lansing included (Michigan Future 1998), economic segregation stems from land use separation. The housing available for many low-income groups is concentrated within the central city or in rural areas, while emerging entry level jobs are typically created within the suburban areas. For those reliant upon public transportation, the spatial mismatch problem is complicated with the dilemma of long commutes, transfers, long headways between buses, and in some cases, trying to cross transit provider boundaries.

2.2 Problems Identified Relating to Transportation Barriers to Job Access

The first step in this task was confirming that the issues that were identified within the research were also issues that would resonate for professionals working with welfare recipients, employers and transit users within the region.

The Transit Task Force, which had its first meeting on May 18, 2001, was created to act as a guiding coalition for this task, as well as others within the Regional Coordination Study. At a meeting of the task force in June 2001, the group assisted in the generation of the following list of local transportation barriers to job access for welfare clients in the Tri-County region.

Tri-County Region Transportation Barriers

1. Spatial mismatch—jobs increasing in outlying areas-can't get people out to jobs in outlying areas without transit
2. People in rural areas want to get to jobs in urban areas, with lack of transit options
3. Suburban areas are underserved by transit and typically, that is where job growth is occurring.
4. Second and third shift—not adequately served by fixed route or demand response
5. Suburban transit routes dispersed-large areas not covered
    - Long headways in outlying areas (time between buses)
    - Long trips (distance takes time, additional time if transfer is needed).
    - Schedules often don't match needs (inflexible)
6. Transportation for those with no automobile in rural areas difficult because destinations are dispersed.
7. The pool of welfare clients is typically changing regularly-need adaptive strategies.
8. Demand response and late night trips typically costly for transit providers.
9. Problems coordinating between counties for transit trips.
10. Childcare—difficult getting childcare that is close to home or close to work. If childcare is not close to work or home, a transit rider is forced to make disconnected trips to drop off and pick up their children. This doubles the amount of trips necessary but is often the only option.
11. Paratransit reservations are required 24 hours in advance, difficult for individuals whose work schedules change from day to day.

Many of the issues identified on the list can be specifically related to the region growing in size, such as longer trip times and problems getting service in suburban areas. Many of these issues also have an operational component, such as coordination of schedules and transfers between the transit providers and improving suburban headways, these issues could be addressed through alternative operations procedures.

2.3 Spatial Mismatch: Land Use Affects Transit

Many of the barriers noted on the committee's list relate to the urban area expanding, and the suburban and rural population increasing. Land use trends affect transit operations and ultimately may affect how many people utilize transit. As was noted in the transit committee's list, rural residents have difficulty utilizing transit into the urban area. With more people moving into rural areas, this problem is compounded. For urban residents who need to access jobs in the suburban areas of Delta Township or Meridian Township a transit commute can take over an hour. Headways are often long in suburban areas (time between buses) and there is typically a lack of direct access to suburban areas a transfer downtown is needed to go from one suburban community to another—for example: Holt to Okemos would require two transfers and about two hours one way on the bus.

The Tri-County "Regional Choices for Our Future" study focused on many of the regional land use trends which show the urban area expanding, residential and employment areas moving to the outlying suburbs and rural areas

of the region. More analysis of how the land use trends affect transit is analyzed in Task II-8.1.

3.0 GEOGRAPHIC STUDY OF ACCESS TO JOBS IN THE TRI-COUNTY REGION

3.1 Technology Based Solutions Used in Other Areas

The consultant team looked at how some other regions utilized GIS (Geographic Information Systems) in order to address welfare to work and childcare issues. These are studies cited in a report funded by the United States Department of Labor entitled Linking People to the Workplace (Jeskey, 2001). These projects utilized GIS to link transit, welfare client, jobs and childcare information.

Following is a list of some of the findings:

- Case Western conducted a GIS study which examined neighborhoods with a high concentration of public assistance recipients and found that even with an 80-minute commute—these recipients could reach less than 44% of job openings.
- MIT-GIS study—these researchers mapped the locations of entry-level jobs, the residences of welfare recipients, daycare centers and transportation systems.
    - Study found that only 43% of entry-level jobs were accessible from transit.
    - Currently studying commute times to suburban high-growth areas of suburbs.
- St. Mary County Maryland—GIS study—mapped welfare recipients/employment locations and transit routes.
    - Resulted in transit agency to reroute some of their buses to better serve target populations
- USDOT—GIS study—relates proximity of welfare recipients to employment and transit service
    - Results showed that the growth in employment is predominantly in the suburban areas and largely out of the reach of transit
    - Also showed that transit did provide access to a suburban job, travel times were extremely long.

There is also a listing in Appendix A of non-technology based welfare to work initiatives from this report. Most of these projects involved operational solutions such as adding or adjusting transit services.

3.2 Relate the Technology Based Examples to Task II-8.2

Utilizing a similar approach to those presented in Section 3.1, data was gathered from the Family Independence Agency, the Capital Area Michigan Works! and the Consumer and Industry Services listing of licensed daycare facilities. The databases were utilized to compare the percent of FIA Clients, Michigan Works! entry level jobs and daycare facilities within transit walking distances within the region utilizing geographic information system (GIS) software. The area's fixed transit routes were acquired from the Capital Area Transportation Authority (CATA) and the Eaton County Transportation Authority (EATRAN). The Clinton Area Transit System does not currently operate any fixed route service.

3.2.1 Explanation of GIS

Geographic Information Systems (GIS) can be utilized to link a number of pieces of data geographically. Data can be overlaid with other data to give a better understanding of an area. For this study, similarly to the other national studies mentioned in Section 3.1, we were interested in how the welfare, employment and daycare information related to the fixed transit routes of the region.

3.3 Data Collection

Following is a list of the data components collected for the Tri-County area from the agencies mentioned in section 3.2:

- Fixed routes
- Potential routes (these were developed by the transit task force)
- Licensed daycare facilities
- FIA clients

- Employers seeking employees who listed through Michigan Works!

3.4 GIS Maps

3.4.1 Address Matching Process

Address matching, also known as geocoding, is the process in which records with address information attached are located on a base street map. These records need to be kept in a database spreadsheet. This spreadsheet may contain a variety of information related to the individual records, however address information is essential to locate the records on the map. The address information useful in address matching includes street address, city, state (if applicable) and zip code. Zip codes are essential when records are located in different cities (i.e. more than one Main Street).

The Tri-County Regional Planning Commission utilized address matching for the information within three databases. The Family Independence Agency provided a database of their regional client addresses for an entire year. This database did not include the names of the clients. The Capital Area Michigan Works! provided a database of regional employers seeking entry-level employees. The Consumer and Industry Services Commission (CIS) web site provided a database of state licensed daycare providers, both in-home and centers.

3.5 Data Analysis

The current fixed routes of the region were overlaid with the three databases that were obtained from the FIA, Michigan Works! and CIS within walking distance (¼ mile) of a fixed transit route. Following is a table representing the data within the transit buffer (1/4 mile around a transit route). The data is visually represented on Map 1. The transit route buffers are displayed in pink, the FIA clients are shown in red, the employers are in blue and the daycare providers are in green.

Regionwide 73% of the FIA clients were within walking distance of a transit route (within the quarter mile buffer). 72% of all of the employers seeking employees and 48% of the regions daycare providers were within walking distance of a transit route. Table 2 reflects the data analysis shown on Map 1, by county. Ingham County is very well serviced, with over 80% of FIA clients and employers within walking distance of transit. The Eaton County percentages also show fairly good coverage, particularly with 289 employers within walking distance of a transit route. Clinton County has such low percentages because there is no fixed route transit service offered within the county. The data that shows up within a buffer in Clinton County is within walking distance of the county border.

Table 2
Current Routes and Overlaid FIA, Daycare and Employer Locations
Family Independence Agency

	Number within walking distance of current route	Total Records	Percent within Walking Distance of a Transit Route
Ingham	6,369	7,834	81.3%
Eaton	1,001	1,736	57.7%
Clinton	18	614	3%

Employers

	Number within walking distance of current route	Total Records	Percent within Walking Distance of a Transit Route
Ingham	998	1,239	80.5%
Eaton	289	397	72.7%
Clinton	7	161	4.3%

Daycare Providers

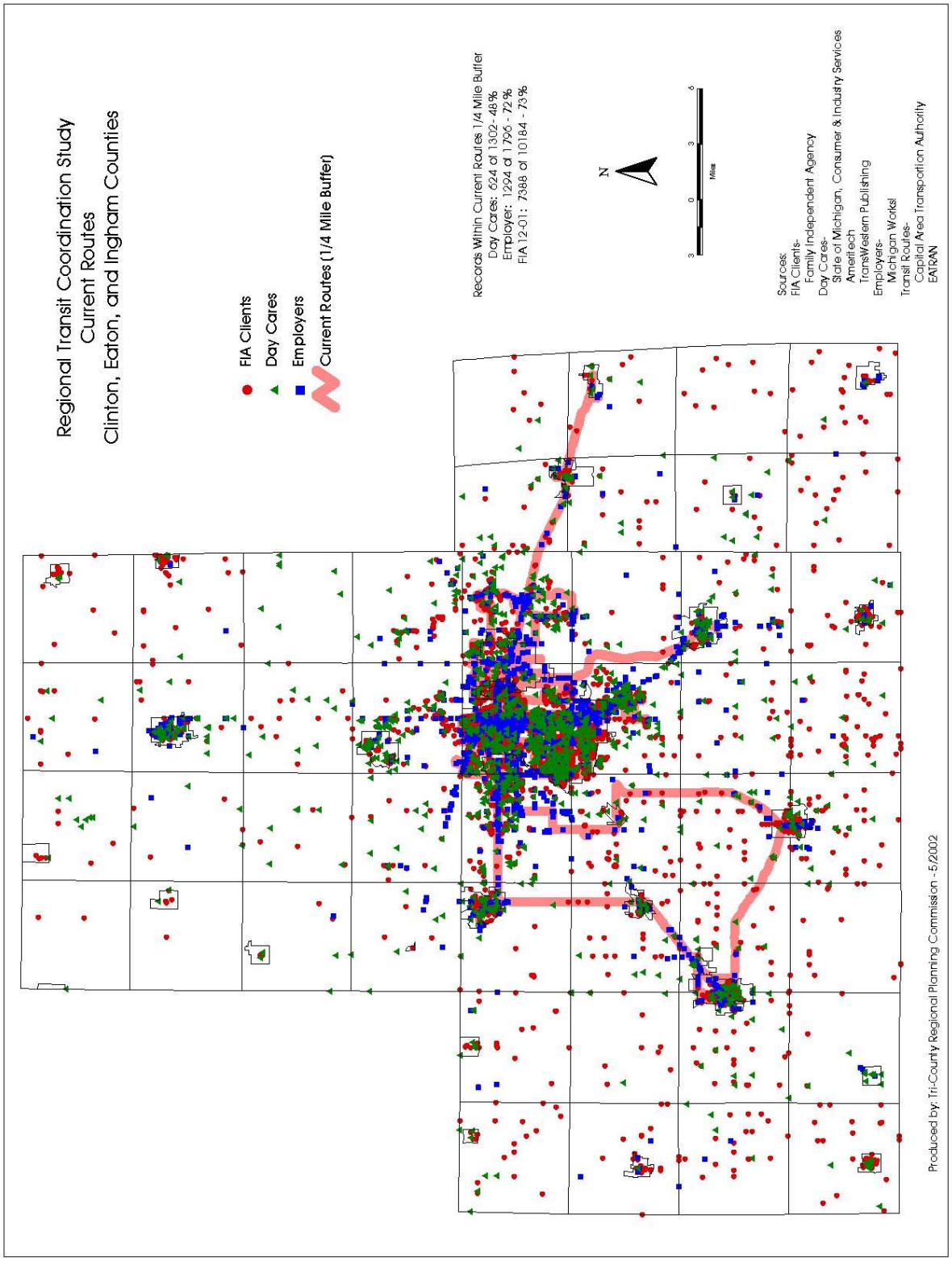
	Number within walking distance of current route	Total Records	Percent within Walking Distance of a Transit Route
Ingham	503	773	65.1%
Eaton	119	331	36%
Clinton	2	198	1%

Because the percentages for the daycare providers within transit walking distance were fairly low, 48% regionally, we also reviewed the number of FIA clients within walking distance of a daycare provider. Regionally, 77% of the daycare providers were within walking distance of the region's FIA clients. Table 3 indicates the number of daycare providers within walking distance for FIA clients' homes by county.

Table 3
Number of Daycare Providers within Walking Distance of FIA Clients

	Number within walking distance for FIA clients	Total Records	Percent within Walking Distance
Ingham	652	773	84.3%
Eaton	251	331	75.8%
Clinton	104	198	52.5%

MAP 1


Regional Transit Coordination Study
Current Routes
Clinton, Eaton, and Ingham Counties
FIA Clients
Day Cares
Employers
Current Routes (1/4 Mile Buffer)
Records Within Current Routes 1/4 Mile Buffer
Day Cares: 624 of 1302 - 48%
Employer: 1294 of 1796 - 72%
FIA 12-01: 7388 of 10184 - 73%
N
3 0 3 6
Miles
Sources:
FIA Clients-
Family Independent Agency
Day Cares-
State of Michigan, Consumer & Industry Services
Ameritech
TransWestern Publishing
Employers-
Michigan Works!
Transit Routes-
Capital Area Transportion Authority
EATRAN
Produced by: Tri-County Regional Planning Commission - 5/2002

4.0 "POTENTIAL" ROUTES FOR THE REGION

4.1 "Potential" Route Drafting Process

The members of the Transit Task Force developed potential routes that would extend into the "underserviced" areas of the region over several meetings. They were developed as a guide for the future fixed route services within the region. These routes are intended to be "rough" in the sense that they could be altered at a later date. These "potential" routes were intended to serve as a basis for modeling ridership numbers. The modeling utilizes population, employment and the number of autos available to generate ridership estimates for the new routes.

The Parsons Transportation Group, under a separate project, is working with the Tri-County Regional Planning Commission to analyze these routes and potential transit demand for these routes if instituted in the future. Table 4 depicts the modeled ridership projected for the "potential" routes within the township where service would be added.

The 2000 base numbers represent a ridership estimate for the routes if it existed at present. The 2025 projection was estimated utilizing the population projected for these areas. The projected ridership numbers increase because of the projected increased population into these townships.

At the time of this memo, the ridership modeling is at a fairly basic level. Because the projections are done at the Traffic Analysis Zone (TAZ) level, altering the "potential" routes from one street to another within the same TAZ will not alter the projections. Other more intricate issues, such as service levels offered, are not included within these modeling projections.

Table 4
"Potential" Route Ridership

	2000 Base	2025 Projected	Percent Change
Bath Township	386	574	49%
DeWitt Township	920	1,123	22%
Watertown Township	216	318	47%
Delta Township	1,917	2,426	27%
Eaton Rapids Township	296	399	35%
Windsor Township	456	606	33%

Source: Parsons Transportation Group, June 2002

4.2 "Potential" Data Analysis

As a part of this task we overlaid the "potential" transit routes with the information that had been gathered from the previous section from the FIA, Michigan Works! and the daycare providers.

The result of adding the "Potential" routes to the analysis added 595 records or 6.4% to the number of records that would be transit accessible, or within ¼ of a mile of a fixed transit route. Following is how each of the categories were affected by the increased service regionally:

- FIA Client 76% (+3%)
- Employer 78% (+6%)
- Daycares 56% (+8%)

Table 5: Current and "Potential" Routes and Overlaid FIA, Daycare and Employer Locations

Family Independence Agency

	Current	Potential	Change	Percent Change
Ingham	6369	6473	104	1.6%
Eaton	1001	1118	117	11.7%
Clinton	18	180	162	900%

Employers

	Current	Potential	Change	Percent Change
Ingham	998	1041	43	4.3%
Eaton	289	320	31	10.7%
Clinton	7	47	40	571%

Daycare Providers

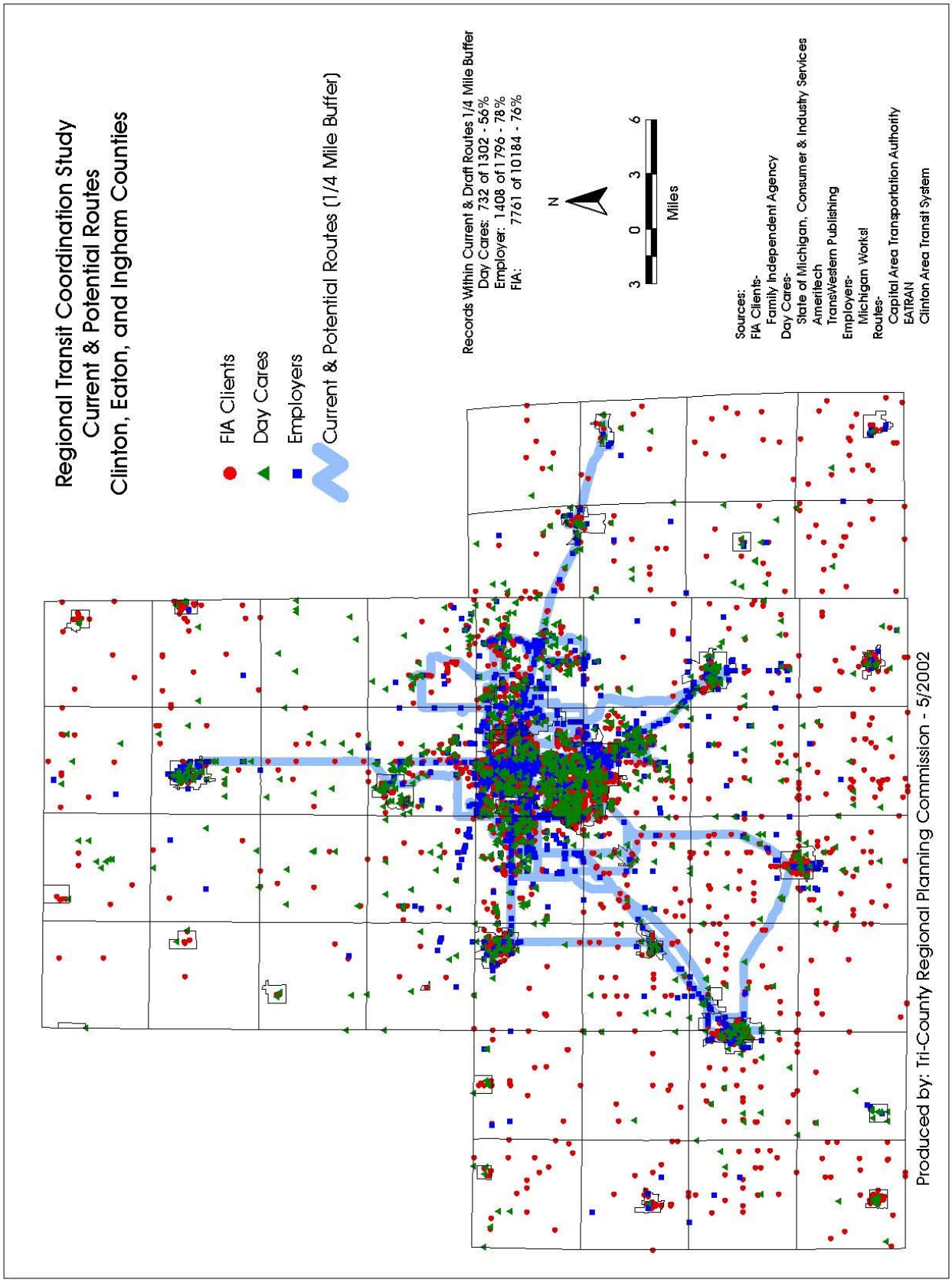
	Current	Potential	Change	Percent Change
Ingham	503	531	28	5.6%
Eaton	119	157	38	31.9%
Clinton	2	44	38	1900%

Table 5 represents the results of the analysis by county. Map 2 is a visual depiction of these "potential" routes overlaid with the regional FIA clients, employer and daycare providers. Because the "potential" routes were added in outlying areas, primarily in Eaton and Clinton counties, the benefit to potential transit riders exists into those counties. Clinton County particularly gained substantially, because there are currently no fixed routes in the county.

Adding "fixed" routes into some of these outlying areas where the Transit Task Force felt the extension of fixed route service may be logical, as the modeled ridership and the GIS analysis suggests, still does not address transit access for a fairly large number of rural FIA clients in the region. Unfortunately, there is really no affordable transit answer for these rural clients. There is already demand response service offered for this population. Any fixed route service would not be cost effective for the transit providers. However, demand response trips into rural areas are expensive, and those costs are typically the burden of the transit provider. Demand response trips can be inconvenient for the rural rider because of the advance reservation needed and the possibility that your trip may be linked with another passenger's rural trip, which may add significant time to your trip.

One solution to preventing the problem from getting worse is to hold down the demand response costs in rural areas by limiting development of low cost housing, like mobile home parks, in rural areas and provide more affordable housing options along existing bus routes through the use of coordinated land use planning and zoning.

MAP 2


Regional Transit Coordination Study
Current & Potential Routes
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Records Within Current & Draft Routes 1/4 Mile Buffer
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Employer: 1408 of 1796 - 78%
FIA: 7761 of 10184 - 76%
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State of Michigan, Consumer & Industry Services
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TransWestern Publishing
Employers-
Michigan Works!
Routes-
Capital Area Transportation Authority
EATRAN
Clinton Area Transit System
Produced by: Tri-County Regional Planning Commission - 5/2002

5.0 DATA LIMITATIONS

5.1 Michigan Works! Database

A major limitation with this GIS analysis is the Michigan Works! data, which only includes an address for the employer seeking employees. It does not show how many employees might be needed at that address. Therefore large employers such as the Lansing Mall may have listings for 100 jobs, but on the GIS map they only show up as one dot on the map.

Another limitation was the fact that not all "employers seeking employees" list through Michigan Works! There was an attempt to collect more "employer seeking employees" data through listings within the classified listings within the Lansing State Journal. However, that information was determined to be unavailable at the time of this study.

5.2 Daycare Provider Database

The daycare information is also limited, because there is no way to know if the licensed providers are actually accepting children, they may have waiting lists. Also the data set does not reflect unlicensed daycare, which is another option often utilized by parents. According to Ken Sperber, director of the Tri-County Office for Young Children, many of the region's Work First clients are in need of overnight and weekend childcare. According to Sperber, currently there are a lack of daycare centers and in-home caregivers that offer this option within the region. The daycare database that was utilized is missing the information on hours of care, which might offer further insight to this issue.

5.3 Limitations of GIS Buffering and Address Matching Processes

The creation of a walking distance of a ¼ mile around a fixed transit route is somewhat misleading, particularly in rural areas where the buses may not be allowed to stop. For example, buses going to Mason and Williamston run express, but the buffer analysis still calculates a ¼ mile walking distance to the route, even though the route may be inaccessible in many of the outlying areas.

The address matching process is also somewhat limited. Because of grammatical errors in the addresses, many of the addresses had to be manually placed into the analysis and several were unable to be included because they only listed a P.O. Box address with no geographic location.

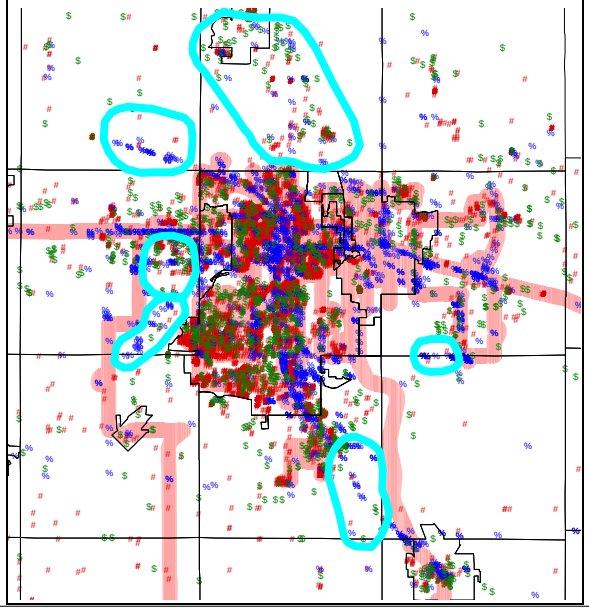
6.0 SUMMARY

6.1 Spatial Mismatch and Transit Access

This task was created to analyze the perceived problem of employers locating in suburban areas and the low-income populations, located predominantly within the central city, finding difficulty in accessing work opportunities there. The task looked at the locations of the region's current transit routes, FIA clients, employers seeking employees and daycare providers.

The analysis found the urban area, particularly in Ingham County, is well covered with transit service for the populations studied in this task. However, for outlying areas showing in Map 3, there are still gaps where clusters of employment, outlined in cyan blue, exist in the urban area and there is a lack of transit service.

Map 3: A Zoom-In on the Urban Area with Employment Clusters



6.2 Regional Coordination

An issue raised throughout the Transit Coordination Study is the need for the three transit providers to coordinate services, time schedules, etc. for better services between county boundaries. Certainly, better coordination across the county boundaries would assist those seeking work in entry-level job areas such as Saginaw Road, west of the Lansing Mall. Task 8.4 will attempt to address this issue in more depth.

6.3 Rural Area Connection

A more difficult problem, which was noted within the context of this study, was the rural low-income populations and their difficulties accessing jobs. Maps 1 and 2 showed a measle-like affect throughout the region's rural areas. The red dots representing FIA clients sprawled along the rural county roads. However, for these rural FIA clients without auto access, there are no fixed route transit options, only demand response service. Further, employment is more difficult to find in rural areas, a trip into the urban area is typically necessary.

For the transit providers, demand response transit trips into the rural areas are the only solution that makes fiscal sense, but even these trips, which are scheduled in advance, are costly because of the distances involved. Rural "Redi-Rides" and "Connectors" have been offered in some areas which cuts some of the costs by linking the rural passengers area into a "fixed route" bus. But the rural service is still costly, with locations more dispersed and less passengers per mile. More scattered site rural development will only exacerbate the current problems. The costs of providing services to these populations will continue to rise. An answer to this problem would require limiting scattered rural residential development and providing more affordable housing options along existing bus routes. This would require more coordinated land use planning and zoning through local jurisdictions than has previously occurred.

6.4 Other Issues to Address in the Future

There are many issues within this report, which were not able to be adequately addressed due to

the limited scope and resources of the project. A more thorough study into the specific challenges that regional welfare recipients face regarding daycare and transportation would include the following:

1. A survey could be conducted regarding the number of FIA clients that do not have auto access, and of these without auto access where do they reside? A survey should also include more information about the daycare providers of FIA clients. Is reliable, convenient daycare difficult to locate within the region? Do the work hours for many FIA clients require them to access overnight or weekend childcare? The relationship between the daycare location and transportation should also be part of a survey. If the FIA client has no auto access and is utilizing childcare do they opt to seek childcare in their neighborhood? How does the schedule of transit and daycare providers affect which jobs they are able to pursue? Further GIS analysis could be done with this survey information.

2. Further study could be done into the location of new jobs in the suburbs. A database could be created which would identify new industrial, commercial, and office developments through building permit information, or some other similar source. This data would pinpoint how, geographically, job growth could be expected to change. This data could be related to existing and possible future bus route changes to better meet prospective employee and employer needs.

Appendix A lists some efforts that were instituted in other cities to assist welfare recipients with access to jobs. Before any programs are instituted such as these, the particular problems of this region should be further investigated. A survey, or some similar measure, might also better target how to address the perceived problems.

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8.0 LIST OF PERSONS AND AGENCIES CONSULTED

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- Jo Sinha, Peckham Vocational Industries
- Ken Sperber, Tri-County Office of Young Children
- Doug Stites, Capital Area Michigan Works!
- Robert Thelen, Ingham Intermediate School District
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Ms. Manning holds a Bachelor's Degree in Urban and Regional Planning from Michigan State University, as well as a Master's Degree from the University of Michigan in Urban Planning. She worked for three years in Grand Rapids as the Senior Planner for the Grand Rapids Area Transit Authority. She has worked for the past three years as an Associate Planner at the Planning and Zoning Center, Inc. on a variety of land use and transportation related assignments.

10.0 APPENDIX A

10.1 Strategies Used in Other Areas for Welfare to Work Opportunities

1. Vanpooling
   - Subscription vanpools-Pensacola FL
     i. Provides flexibility and convenience needed with changing workforce
     ii. In this model, half of the funding was provided by the employer and half by the employee
     iii. Safe and reliable alternative
   - Late night service
   - Milwaukee developed a childcare van system which picks up children of working, low-income parents at their home and delivers them to daycare centers at no charge to the parents. This effort was organized to help reduce commute times for parents trying to work their way off of welfare.
   - Baltimore-reverse commute service which utilized vans to shuttle welfare recipients from areas within the central city out to employment centers within the suburbs.
2. Outreach
   - Detroit SMART has developed a GIS (geographic information system) that links MESC information on job openings with route information and daycare centers so that clients can find jobs available off of a convenient route from a client's home.
3. Information Mobility Managers to provide training on how to effectively ride the bus
   - Many have difficulties understanding transit schedules and how to transfer buses, particularly between systems.
4. Guaranteed Ride Home
   - Provides emergency taxi rides (limited number per month) to use during off-hours.
5. Faith Based Organization Involvement
   - Providing rides to and from workplaces
6. Expanded Route Service
   - Planning new service in areas with high employment densities (Hartford, CT)
   - Columbus OH-employers in an unserved corridor offered to pay for unfilled bus seats to add fixed route to their area to compete for jobs.
   - St. Louis expanded reverse commute service
7. Computerized Trip Planning
   - Scheduling trips on transit routes
   - If arrangements can't be made on transit, name goes into vanpool database

Source: (Jeskey, 2001)

11.0 APPENDIX B

11.1 Transit Definitions

Fixed Route: bus service on a fixed schedule with a specific route, stopping to pick up and drop off passengers.

Express Route: fixed route with a limited number of stops.

Demand Response: vehicles not on a fixed route or fixed schedule, vehicles may be dispatched to pick up one of several passengers. Also called dial-a-ride or door-to-door transportation.

Flex Route: is a route with a fixed beginning and ending point with a fixed schedule at these points. The stops in between vary depending upon rider destinations. Loose schedules can accommodate these diverging trips.

Connector: Fixed routes that has limited service into rural areas. Intended to create a bridge between demand response and fixed route services.

Headways: The scheduled time between buses.

Michele: c:/winword/tcrpc/transit/task8.2.doc